

Appln No. 10/660,452
Amdt date November 7, 2008
Reply to Office action of June 2, 2008

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1 - 6. (Cancelled)

7. (Currently Amended) An intervertebral disk prosthesis for use in the vertebral column, comprising:

a base plate;

a top plate;

a core arranged in between the base plate and the top plate and being in contact with the base plate and the top plate, wherein the core is ~~biconvex~~, ~~having a convex~~ has a curved surface on a side facing the top plate and a ~~convex~~ curved surface on a side facing the base plate, the ~~convex~~ curved surfaces forming sliding faces;

the top plate having a curved section in sliding engagement with the ~~convex~~ curved surface of the core facing the top plate;

the base plate having a curved section in sliding engagement with the ~~convex~~ curved surface of the core facing the base plate;

wherein the core comprises an upper body defining the ~~convex~~ curved surface on the side facing the top plate, a lower body defining the ~~convex~~ curved surface on the side facing the base plate and an annular intermediate elastic body between and separating the upper and lower bodies to provide cushioning for the prosthesis;

wherein the intermediate elastic body is configured to extend primarily in a plane generally perpendicular to the vertebral column; and

wherein the prosthesis is configured to replace the vertebral disk.

8. (Previously Presented) The intervertebral disk prosthesis according to claim 7, the top plate having an outer edge and the base plate having an outer edge, wherein the base plate and the top plate each have teeth on their outer edges extending vertically outwards away from the core to engage in an adjacent wall of a vertebra in the vertebral column.

9 - 13. (Cancelled)

14. (Original) The intervertebral disk prosthesis according to claim 7, wherein along a central axis extending from the base plate to the top plate a mandrel is provided to limit the relative movement between the base plate and the top plate about the central axis.

15. (Currently Amended) An intervertebral disk prosthesis for use in the vertebral column, comprising:

- a base plate;

- a top plate;

- a core arranged in between the base plate and the top plate and being in contact with the base plate and the top plate, wherein the core ~~is biconvex, having a convex~~ has a curved surface on a side facing the top plate and a ~~convex~~ curved surface on a side facing the base plate, the ~~convex~~ curved surfaces forming sliding faces;

- the top plate having a curved section in sliding engagement with the ~~convex~~ curved surface of the core facing the top plate;

- the base plate having a curved section in sliding engagement with the ~~convex~~ curved surface of the core facing the base plate;

- wherein the core comprises an upper body defining the ~~convex~~ curved surface on the side facing the top plate, a lower body defining the ~~convex~~ curved surface on the side facing the base plate and an intermediate elastic body between and separating the upper and lower bodies to provide cushioning for the prosthesis;

- wherein the intermediate elastic body is configured to extend primarily in a plane generally perpendicular to the vertebral column;

- wherein the prosthesis is configured to replace the vertebral disk; and

- wherein the core has a bore extending from the base plate to the top plate and wherein a connecting sleeve is provided within the bore of the intermediate elastic body to engage the base plate and the top plate.

16. (Previously Presented) The intervertebral disk prosthesis according to claim 15, wherein at least one screw is screwed into the connecting sleeve to connect the base plate, the top plate, and the core to each other.

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17 - 18. (Cancelled)

19. (Previously Presented) The intervertebral disk prosthesis according to claim 7, wherein the base plate is cylindrical in shape to accommodate a cylindrical casing that is operable to be placed on the cylindrical base plate.

20. (Previously Presented) The intervertebral disk prosthesis according to claim 19, wherein the cylindrical casing has two opposite ends and teeth located in one of its ends to engage an adjacent wall of a vertebral body.

21 - 27. (Cancelled)

28. (Previously Presented) The intervertebral disk prosthesis according to claim 7, wherein the curved section of the top plate is concave.

29. (Previously Presented) The intervertebral disk prosthesis according to claim 7, wherein the curved section of the base plate is concave.

30. (New) The intervertebral disk prosthesis according to one of claims 7, 8, 14, 15 or 16 wherein the curved sections of the base plate and the top plate are constructed as convex and the curved surfaces of the core are constructed or concave.

31. (New) The intervertebral disk prosthesis according to one of claims 7, 8, 14, 15 or 16 wherein the curved sections of the base plate and the top plate are constructed as concave and the curved surfaces of the core are constructed or convex.

32. (New) The intervertebral disk prosthesis according to claim 7, wherein the annular intermediate elastic body has bore extending therethrough in a direction from the lower body to the upper body and the lower body and the upper body are located outside the bore.